EPI Update for Friday, October 24, 2008
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Pertussis outbreaks on the rise- your actions make the difference**
- **Respiratory virus season has arrived**
- **Halloween fun facts**
- **Autumn farm outings to orchards and pumpkin patches**
- **Meeting announcements and training opportunities**

Pertussis outbreaks on the rise- your actions make the difference
Pertussis (whooping cough) is endemic in the United States often with epidemic cycles every 3-4 years. In 2004, there was a national epidemic with the annual number of reported cases the highest since 1959. The number of cases in Iowa this year is lower than last year; however, several localized outbreaks are occurring in Iowa right now.

What are the key clinical markers of pertussis?
Symptoms of early pertussis may be difficult to distinguish from other respiratory infections and include a cough that gradually becomes paroxysmal and may last 1-2 months. Paroxysms may be followed by a characteristic crowing or high-pitched inspiratory whoop, and may induce vomiting. However, infants under 6 months, vaccinated children, and adolescents and adults often do not have the typical whoop or cough paroxysm.

Who should be tested for pertussis?

- Any person presenting with symptoms consistent with pertussis, i.e. individuals with acute cough and exposure to a case (or in an outbreak situation).
- Whenever pertussis is highly suspected. This includes individuals with prolonged cough and any of the following: paroxysms of coughing, post-tussive vomiting, inspiratory whoop or apnea. Infants may present with apnea as their primary symptom of pertussis.
- Consult your local public health agency, the IDPH or your hospital's epidemiologist for further assistance.

Who should not be tested for pertussis?

- People who are asymptomatic (regardless of contact with a case or if there is an outbreak).
- People who have had symptoms of pertussis and have been coughing for more than 30 days.
- Person who have been in contact with a pertussis case who are not coughing.
- The worried well.

Note: Inappropriate testing can lead to false-positive results.

When is prophylaxis recommended?

As part of public health investigations of reported cases of pertussis, letters are often sent to persons who may have been exposed. These letters should explain whether prophylactic treatment is indicated.

Prophylaxis of asymptomatic persons, who have had contact with a confirmed case of pertussis, is recommended when the exposed person had significant contact with the case during the case's infectious period regardless of vaccination status.

What about the new pertussis vaccine?
While the new pertussis containing tetanus vaccine will reduce the risk of getting pertussis, it is not 100 percent effective. Remember, persons in close contact with cases of pertussis should be given prophylactic antibiotics regardless of their immunization status. See the new recommendation for immunization with Tdap of adolescents and adults at www.cdc.gov/mmwr/preview/mmwrhtml/mm5739a4.htm .

For more information on pertussis go to www.idph.state.ia.us/adper/pertussis.asp.

Respiratory virus season has arrived
As the temperature drops, respiratory viruses become more common in our communities. Although influenza is often suspected at this time of year, other respiratory viruses like parainfluenza, enterovirus, RSV, and adenovirus are also much more common. Note:

- **Parainfluenza-1** is the leading cause of croup in children. Human parainfluenza viruses are second only to RSV as a cause of lower respiratory infection in children.

- **Enterovirus** infection may cause no illness, mild respiratory disease, or aseptic meningitis. The majority of aseptic meningitis infections are attributed to enterovirus.

- **Respiratory Syncytial Virus (RSV)** is the most significant cause of bronchiolitis and pneumonia in children under the age of 1 in the U.S. Each year 75,000 to 125,000 children in this age group are hospitalized for RSV. RSV is gaining recognition for causing respiratory illness in adults.

- **Adenovirus** is a frequent cause of acute respiratory distress (ARD) and can cause outbreaks. Adenoviruses may cause various other illnesses such as gastroenteritis, conjunctivitis, cystitis, and a rash. There are 49 different types of adenoviruses that have the ability to cause infection in humans; 4 and 7 most often result in respiratory illness.

Halloween fun facts
- The largest pumpkin grown was recorded on October 2, 2004 weighing 1,446 lbs.
- Illinois grows more pumpkins than any other state in the country. It harvests nearly 12,300 acres of fruit.
- The world's fastest time to carve a face into a pumpkin is 54.72 seconds, by Stephen Clarke (USA), on October 23, 2001 (source: Guinness World Records).
- More than 93 percent of children go trick-or-treating each year (source: NCA).

- Halloween is also recognized as the third biggest party day after New Year's and Super Bowl Sunday.
- There are an estimated 36.8 million potential "trick-or-treaters" ages 5-13.
- Legendary magician Harry Houdini died in Detroit from a ruptured appendix on Halloween in 1926.

Autumn farm outings to orchards and pumpkin patches
Families and children's groups frequently take field trips to farms, pumpkin patches and orchards this time of year. Such field trips are great fun, but people must be aware of certain risks. Farms have animals producing manure which can harbor bacteria that can make people ill, and many places offer unwashed apples and unpasturized apple cider.

After visiting a farm, pumpkin patch or orchard, make sure that everyone washes their hands with warm water and soap for at least 20 seconds. Also, make sure all apples are washed before eating and any apple cider is pasteurized.

Unfortunately, unpasturized cider and apple juice can carry a risk for diseases such *as E. coli* O157 and others. Pasteurized products typically include those packaged in cans, bottles, and boxes, and can be found unrefrigerated in the grocery store. Unpasturized cider and juice may be found on ice or in refrigerated display cases, and in produce sections at orchards and grocery stores. Past outbreaks have been caused by cider and apple juice that was not pasteurized or not fully pasteurized. Children, elderly and those who are immuno-compromised are at particular risk of becoming ill after drinking these unpasturized products. If product labeling is unclear, ask the orchard owners or grocery store whether the juice being offered has been pasteurized. IDPH and the Centers for Disease Control and Prevention recommend that unpasteurized apple cider and apple juice be heated to at least 170 degrees F before drinking. For more information about food-borne illnesses, visit www.idph.state.ia.us/adper/illness.asp.

Meeting announcements and training opportunities
None.

Have a healthy and happy week!
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